

## 5.2 Eastern Mixed-grass Prairie (Drift Prairie)

**Area:** 16,425,000 acres (6,647,000 ha)

**Description and Overall Condition:** This landscape component consists of the Eastern mixed-grass prairie, or Drift Prairie, and associated wetlands. The Drift Prairie is the transition zone between the wetter tallgrass prairie to the east and drier shortgrass prairie to the west. A high concentration of temporary and seasonal wetlands occurred within the prairie before settlement. Approximately 1.4 million wetland basin acres are present although extensively drained or filled. The Pembina Hills, Turtle Mountains, and Devils Lake are defining features within this region but are included under the landscape component of Upland Deciduous Forest (see sections 5.9.a, 5.9.b and 5.9.c for information on these focus areas). A large area of untilled land due to sandy, gravelly soil from another glacial lake delta exists in and around McHenry County and south of the Turtle Mountains. This focus area, referred to as “Glacial Lake Deltas” is to a large extent native vegetation with many wetlands remaining. In more recent years, irrigation has allowed areas once unsuitable for cropland to be farmed for potatoes and other crops. The Souris River (see section 5.7.e for information on this focus area) riparian area divides the Glacial Lake Deltas. Another focus area, the “Devils Lake Basin” is the result of glacial ice blockage and includes a high concentration of larger wetlands or lakes and slightly lesser amount of grassland than the Glacial Lake Deltas. This focus area is extremely important for migrating waterfowl and other waterbirds and shorebirds. The rest of the Drift Prairie is generally flat land much of which has been converted to cropland of spring wheat, durum, other small grains, canola, sunflowers, and alfalfa. The Sheyenne and James rivers meander through this region (see sections 5.7.c and 5.7.d for information on these focus areas).

### Predominant Natural Vegetation:

Grasses: prairie junegrass, green needlegrass, needle-and-thread, blue grama, little bluestem, yellow sedge, Western wheatgrass, Canada wild rye, spike oats, big sandgrass, porcupine grass, mat muhly, side-oats grama, Leiberg's panicum, needleleaf sedge, threadleaf sedge  
Forbs: pasque flower, Western wall-flower, torch flower, prairie rose, Missouri milkvetch, purple loco, lead plant, Indian breadroot, purple prairie-clover, gaura, hairy puccoon, harebell, stiff goldenrod, smooth fleabane, purple coneflower, upland wormwood, fringed sage

### Associated Species of Conservation Priority:

Birds	Mammals	Reptiles/Amphibians
American Bittern Northern Pintail Northern Harrier Swainson's Hawk Ferruginous Hawk Sharp-tailed Grouse Willet Upland Sandpiper Marbled Godwit Wilson's Phalarope Short-eared Owl Loggerhead Shrike Sedge Wren Sprague's Pipit Lark Bunting Grasshopper Sparrow Baird's Sparrow Le Conte's Sparrow Nelson's Sharp-tailed Sparrow Chestnut-collared Longspur Dickcissel Bobolink	Arctic Shrew Pygmy Shrew Richardson's Ground Squirrel	Plains Spadefoot Canadian Toad Smooth Green Snake Western Hognose Snake

### Other Characteristic Wildlife:

Birds: American wigeon, green-winged teal, mallard, blue-winged teal, Northern shoveler, gadwall, lesser scaup, red-tailed hawk, American kestrel, gray partridge, ring-necked pheasant, spotted sandpiper, killdeer, mourning dove, common nighthawk, Western kingbird, Eastern kingbird, horned lark, American crow, Eastern bluebird, common yellowthroat, clay-colored sparrow, vesper sparrow, Savannah sparrow, Western meadowlark, brown-headed cowbird

Mammals: Northern short-tailed shrew, white-tailed jackrabbit, snowshoe hare, Franklin's ground squirrel, thirteen-lined ground squirrel, Northern pocket gopher, olive-backed pocket mouse, Western harvest mouse, deer mouse, Northern grasshopper mouse, prairie vole, meadow vole, meadow jumping mouse, Western jumping mouse, coyote, red fox, raccoon, badger, striped skunk, white-tailed deer, moose

Reptiles and Amphibians: American toad, Great Plains toad, Woodhouse's toad, Northern leopard frog, chorus frog, tiger salamander, plains garter snake, common garter snake

### 5.2.a Focus Area: Glacial Lake Deltas

**Area:** 1,500,000 acres (606,000 ha)

**Public Landholdings:** 92,200 acres (NDGFD 2,300; NDSLD 34,700; NDFS 800; USFWS 54,400)

**Description and Condition:** Glaciated flat sheets of sand and gravel or rolling sand dunes make this area rather unsuitable for cropland. The droughty soils are used primarily for cattle grazing; however, some cropland exists and irrigation is allowing once unsuitable land to be farmed. Tallgrass prairie communities also occur within this focus area. The vegetative cover is thin and dominated by little bluestem, indiangrass, prairie sandreed, switchgrass, and sand bluestem.

#### Key Species of Conservation Priority

Birds: Sprague's pipit, Baird's sparrow, Le Conte's sparrow



*Native mixed-grass prairie hillside.*

### 5.2.b Focus Area: Devils Lake Basin

**Area:** 1,295,000 acres (525,000 ha)

**Public Landholdings:** 71,600 acres (NDGFD 3,300; NDSLD 22,500; NDPRD 1,000; USFWS 44,800)

**Description and Condition:** Extensive wetland drainage and intense farming is predominant due to the rich soil and relatively flat topography. A higher concentration of large wetlands and lakes exist, in part from the drainage of smaller, temporary and seasonal wetlands for farming. The James and Sheyenne rivers meander through the southern portion of the basin, with adjacent non-wooded uplands intact in many areas.

#### Key Species of Conservation Priority

Birds: American bittern, Northern pintail, Northern harrier, Swainson's hawk, sharp-tailed grouse, willet, upland sandpiper, marbled godwit, short-eared owl, bobolink

Mammals: Richardson's ground squirrel

Reptiles and Amphibians: plains spadefoot

### 5.2.c Conservation Problems and Actions for the Eastern Mixed-grass Prairie (Drift Prairie)

EASTERN MIXED-GRASS PRAIRIE (Drift Prairie)				
CONSERVATION PROBLEM	CONSERVATION ACTION	POTENTIAL PARTNERS		
Direct Loss of Habitat				
Substantial loss of native prairie.	Protect native prairie where possible, particularly within the Glacial Lake Deltas (e.g. easements or land acquisition).	NDGFD USFWS NDSLD NRCS PPJV	NDNRT DU TNC PF	Private Landowners
Habitat Fragmentation				
Highly fragmented with roads, shelterbelts, and agricultural practices.	Consider removal of dilapidated shelterbelts or stands of trees within grassland, particularly within 50 meters of grassland patches >100 ha.	NDGFD USFWS NDSLD NRCS PPJV	TNC	Private Landowners  Volunteers
Habitat Degradation				
Improper grazing practices.	Implement grazing systems to benefit mixed-grass prairie species.	NDGFD NDSLD USFWS USFS NRCS PPJV	DU TNC	Private Landowners  NDSUEXT
Loss of fire regime.	Work cooperatively with state and federal agencies to develop BMPs that promote use of fire.	NDGFD NDSLD USFWS NRCS	TNC	
Long term haying of native prairie.	Find alternative hay sources (e.g. grass banks)	No partners identified.		
Invasive and Noxious Species				
Noxious weeds (e.g. leafy spurge).	Control noxious weeds through biological and chemical methods.	NDGFD NDSLD USFWS USFS NRCS	NDWCA	Private Landowners NDSUEXT
Woody encroachment.	Use fire or other tools to prevent woody invasion of grassland.	NDGFD NDSLD USFWS USFS NRCS	TNC	
Pesticides				
Pesticide drift and application.	Work with state and federal agencies to enforce existing pesticide regulations.	NDGFD USFWS USFS NDDAG		
Industrial Development				
Wind energy potential is fair to good, with an area in western Dickey and Lamoure County being excellent to outstanding.	Coordinate with wind energy companies to minimize impacts.	NDGFD USFWS		WIND NDSEED

EASTERN MIXED-GRASS PRAIRIE (Drift Prairie)				
CONSERVATION PROBLEM	CONSERVATION ACTION	POTENTIAL PARTNERS		
Data Gaps				
Lack of baseline information on SoCP.	Survey areas of data gaps. Conduct research/surveys to establish baseline information on SoCP.	NDGFD USFWS USFS NPWRC PPJV NDSLD	DU TNC	Volunteers Universities
Conservation Awareness				
Continuing education.	Create informational brochures, use tools such as television, radio, newspapers, magazines, and public forums, to provide information to citizens on the need for conservation of fish and wildlife resources and habitat.	NDGFD USFWS USFS NRCS	DU TNC Audubon	NDSUEXT